Remarks

1. The present response is to the Office Action mailed the above-referenced case on August 13, 2007. Non-elected claims 12-17 and 30-34 stand as withdrawn. Claim 35 has been added. Claims 2, 4-11, and 20-29 have been canceled. Claims 1, 18 and 35 are standing for examination. In the action the examiner reiterated that a number of Official Notices are considered admitted prior art. The claim of priority to application number 09/127,284 as a continuation-in-part is objected to because of lack of a common inventor. Claims 1,2 6-10, 20-22 and 27 were rejected under 35 USC §103(a) over Iwamura (JP 10-51445 A) in view of Levy et al. (U.S. Patent No. 5,291,550). Claims 4, 5, 11, 23, 24, 28 and 29 are rejected under 35 USC §103(a) over Iwamura in view of Levy et al. and Applicant's admitted prior art (i.e., unchallenged Official Notices). Finally, claims 25-26 are rejected under 35 USC §103(a) over Iwamura in view of Levi et al., in view of Yeh (U.S. Patent No. 6,690,929), and further in view of Applicant's admitted prior art (i.e., unchallenged Official Notices).

Official Notice Issue

2. Since all of the claims to which the Official Notice issue was relevant have been canceled, Applicant respectfully declines to comment further on this issue.

Claim Rejections – 35 USC § 103(a)

3. Since claims 1 and 18 are the only remaining claims for which there is a standing rejection, Applicant will only comment on the rejection under 35 USC §103(a) pertaining to these claims. Claims 1 and 18 were rejected under 35 USC §103(a) as being unpatentable over Iwamura (JP 10-51445 A) in view of Levi et al. (US Patent NO. 5,291,550)). Applicant acknowledges receiving a human-machine assisted

translation of Iwamura).

Claim 1 as previously amended recites:

1. (Previously amended) A quality of service (QoS) implementation system for a client requesting a communication session with an agent of a session host, comprising:

a control node of the session host connected to the system for receiving a session request for the agent from the client and for soliciting client data associated with the request;

a data storage system for storing client data;

a processor for comparing solicited client data to stored client data and for determining a quality of service option from more than one available option; and

an option execution module for executing the selected quality of service option for application to the session;

characterized in that upon receiving a session request at the control node, the control node solicits data from the request and accesses the data storage system to compare the solicited data with data stored therein and wherein depending on the results of data comparison, determining at least an expectation of future profit as a result of the session, a QoS level appropriate to the criteria governing the comparison is selected and executed for application to the granted session.

4. [Claim 1] Examiner asserts that Iwamura discloses a quality of service (QoS) implementation system for a client requesting a communication session with a session host, comprising:

a control node of the session host connected to the system for receiving a session request from the client and for soliciting client data associated with the request (Detailed Description: ¶ 18 – The user sends a QoS demand to the network);

a data storage system for storing client data (Abstract; ¶ 22; Detailed Description: ¶¶ 24-25 – History data is stored. Furthermore, a user's conformance with a traffic

agreement is assessed, thereby implying that such a traffic agreement is stored for future reference);

a processor for comparing solicited client data to stored client data and for determining a quality of service option from more than one available option (Detailed Description: ¶¶ 24-25 – If a user has met the conditions of a traffic agreement, then the demanded QoS is maintained and guaranteed. Otherwise, e.g., if the user has insufficient funds, the demanded QoS is not maintained and/or guaranteed); and

an option execution module for executing the selected quality of service option for application to the session (Detailed Description: ¶¶ 24-25 – If a user has met the conditions of a traffic agreement then the demanded QoS is maintained and guaranteed. Otherwise, e.g., if the user has insufficient funds, the demanded QoS is not maintained and/or guaranteed);

characterized in that upon receiving a session request at the control node, the control node solicits data from the request and accesses the data storage system to compare the solicited data with data stored therein and wherein depending on the results of data comparison, determining at least an expectation of future profit as a result of the session, a QoS level appropriate to the criteria governing the comparison is selected and executed for application to the granted session (Detailed Description: ¶¶ 24-25 – If a user has met the conditions of a traffic agreement, then the demanded QoS is maintained and guaranteed. Otherwise, e.g., if the user has insufficient funds, the demanded QoS is not maintained and/or guaranteed. A person who has the funds to pay for services rendered and pays accordingly can be interested as being a more profitable customer than someone who does not have the funds to pay for services rendered and therefore cannot pay for such services. The service provider is expected to reap greater benefit from a user who can pay for a granted session as opposed to a user who cannot pay for the granted session, which is why the service provider guarantees better service to the more financially solvent user. Since a determination of expected benefit is only a prediction, there is no requirement that the prediction be 100 accurate; instead, it is a reasonable guess anticipating future behavior, which is

an assumption made by Iwamura when deciding which QoS level to maintain and/or guarantee for each user based on the user's financial situation).

The Examiner continues regarding claim 1, stating that Iwamura suggests that the expectation of benefit is profit-based (Detailed Description ¶¶ 24-25 – If a user has met the conditions of a traffic agreement, then the demanded QoS is maintained and guaranteed. Otherwise, e.g., if the user has insufficient funds, the demanded QoS is not maintained and/or guaranteed. A person who has the funds to pay for services rendered and pays accordingly can be interested as being a more profitable customer than someone who does not have the funds to pay for services rendered and therefore cannot pay for such services), yet Iwamura does not expressly disclose that the session request received from the client is a request for an agent of a session host nor that the expected future benefit is determined as a result of the session. However, Levy makes up for these deficiencies in its teachings of a call center in which callers are economically routed to an Agent based on various factors, such as if the caller or call center is willing to pay the extra cost of routing to a remote location or factors regarding the expected profit and extra cost attributed to the call center's session associated with answering a caller's call (abstract; col. 3, line 46 through col. 4, line 34). As a preliminary note, it should be pointed out that Levy's "customer" is the customer of the call distributor; i.e., Levy's "customer" is contracting services from the call distributor to route calls from its call originators. Levy's routed calls come from call originators. Based on the nature of a call and real time variables, such as the network load conditions, the expected revenues and costs of a given call are assessed. The analysis of revenues and costs associated with each call yields an understanding of the probable profitability corresponding to each call. Further, the assessment of whether the main purpose of a call is to place an order or receive general information (as taught in the abstract and col. 3, line 2-3 of Levy) results in a determination of the probable profitability of a call (L:evy: abstract). Similarly, Iwamura assesses a quality of service of communication that will be provided and/or

guaranteed to users based on each user's ability to pay for the user's desired quality of service (which is suggestive of future profit, since a service provider profits more from paying customer than from customers who fail to pay their bills). As per ¶¶ 24-25 of Iwamura, if a user has met the conditions of a traffic agreement, then the demanded QoS is maintained and guaranteed. Otherwise, e.g., if the user has insufficient funds, the demanded QoS is not maintained and/or guaranteed. A person who has the funds to pay for services rendered and pays accordingly can be interested as being a more profitable customer than someone who does not have the funds to pay for services rendered and therefore cannot pay for such services. The service provider is expected to reap greater profitable benefit from a user who can pay for a granted session as opposed to a user who cannot pay for the granted session, which is why the service provider guarantees better service to the more financially solvent user. Both Iwamura and Levy make business decisions that are expected to economically benefit a service provider and each ultimately renders customer service to its users (based on expected product) accordingly. Additionally, both Iwamura and Levy attempt to minimize expenses to the service provider by controlling the quality of communication service available to each user who requests service from the service provider. Levy envisions charging a call center for the receipt of calls via 800 numbers as well as charging for 900 numbers; therefore, Levy describes a specific environment that would benefit from Iwamura's ability to route communications based on a guaranteed QoS while Iwamura's application to a specific environment would expand the usefulness and marketability of Iwamura's invention. Consequently, Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Iwamura to be applied in the area of routing a client to an agent for a communication session such that the session request received from the client is a request for an agent of a session host and the expected future benefit is determined as a result of the session in order to increase the usefulness of Iwamura's invention across various fields (including call center

management), thereby making Iwamura's invention more comprehensive and marketable.

5. Applicant has canceled all previously examined claims except 1 and 18 in order to focus the examination on what the Applicant sees as the core of his invention. Furthermore, Applicant respectfully submits the following arguments distinctly and specifically pointing out how the language of the claims patentably distinguishes them from the references, specifically by providing underlying analysis showing why the portions of the prior art relied on by the Examiner do not support the Examiner's position.

Applicant respectfully disagrees with the Examiner's interpretation of the claim language and the references, and will attempt to be more clear in stating why. First, on page 8, lines 25 and 26, it is clearly stated that a "session host" is "an entity maintaining one or more communication centers". This is in stark contrast to the systems of Iwamura and Levy, both of which clearly teach network service provider solutions. So it is not accurate to characterize the "network" of Iwamura (this is what does the deciding in ¶¶ 24-25) as a "control node of the session host" as recited in claim 1. Furthermore, Applicant notes that Iwamura's terms are very clear when considered in terms of well-known wide area networking principles, and they teach away from the instant invention. Secondly, The Examiner has incorrectly characterized Iwamura when stating several times that "if a user has met the conditions of a traffic agreement, then the demanded QoS is maintained and guaranteed". The term "traffic contract" referred to in Iwamura is a protocol-level term used in network engineering (see http://en.wikipedia.org/wiki/Traffic_contract, which gives a good description of what a person having ordinary skill in the art would read "traffic contract" to mean in Iwamura; also see ¶ 18 of Iwamura). The reason this is relevant is that when one reads Iwamura's ¶¶ 24-25 with an understanding of wide area networking, what one reads is that, at the communications setup step, a traffic contract and QoS is forwarded to the service provider from the edge router, the

network performs an (essentially instantaneous) judgment of whether the network can physically carry the requested traffic, and whether the QoS can (technically) be guaranteed. If communication can be performed, a notification is sent to the user terminal (an edge router), and the requested ability is guaranteed (this is ¶24). Then, in a new step of Iwamura's teaching, "judgment is made on whether the user did not pay the QOS fee or whether the user paid it. If the fee is not paid or cannot be paid, treatment is performed so that either the user cannot enter the communication mode for the network, or the requested quality is not guaranteed. Also, when the network performs control of other fees in addition to the QOS fee, judgment on the other fees is performed so that it is also possible to perform acknowledgement of the communication mode and guarantee of the quality, etc. Said judgment can be performed in the same way as the judgment for the well known QOS class." A person having ordinary skill in the art would read this and say "check for credit hold before granting the guarantee of QoS" – and this does not require transaction history data. One would not expect a core data router to consult a customer and transaction history database and analyze transaction history to calculate profit potential from a single ATM network session request for a guaranteed QOS; common sense and Iwamura teach that a simple data field could contain an element of the set {paid up, not paid up, can't pay (bad credit)}, which corresponds to the cases Iwamura describes. For clarity, the inventor *does* teach consulting a transaction history database (page 13 line 27 to page 14 line 2, for example). To make this clearer and to focus examination, Applicant has added the claim limitation "and transaction history data" to claims 1 and 18.

Secondly, the profit contributions in Iwamura are calculated from the network operator's point of view, not the operator of the communications center's point of view. While Levy does teach the minimizing of cost and possibly the maximizing of revenue for the communications center operator (col. 10, lines 32-63), Levy does not teach anything about quality of service in the very specific technical sense meant by

the inventor and by Iwamura (¶¶ 15-17); see also
http://en.wikipedia.org/wiki/Quality_of_service, which gives very good descriptions
of what a person having ordinary skill in the art of wide area networking would
understand the term "quality of service" to mean. Levy teaches only how to
optimally balance transport costs and wait times across multiple call centers when
served by a network call distribution system; the calls all have the same quality of
service in Levy, which is to say they are all telephone calls carried on the TDM
network (col. 3, line 21 to col. 4, line 3). The instant invention clearly refers to profit
in claim 1 as being profit for the session host, a limitation that is not taught by
Iwamura; this defect is not corrected by Levy because Levy does not teach anything
to do with customer service. To make the distinction clearer, Applicant has added the
limitation "excluding any impact from transport costs" to claims 1 and 18. It should
be noted that the motivations of Iwamura (only give premium service to network
users who pay for it), Levy (minimize transport costs without unduly affecting
customer service quality by smarter load balancing across sites) and the instant
invention and its parent application (maximize profit from customer service
operations by leveraging what you know about your customers) are widely divergent,
That this is crucial can be understood by considering the economics of customer
service: the costs of transport are minimal compared to the costs of the staff who
serve customers, and the incremental profit (to the session host) to be gained from
optimizing transport costs is negligible compared to the profit impact of optimal
routing (parent application) and quality of service provision (instant application).
Accordingly, Applicant has added the limitation excluding transport costs and
canceled all dependent claims to focus the examination on this one key point.

The Applicant believes it has clearly been shown that Iwamura, with or without Levy,
does not teach at least "a control node of the session host", a "data storage system for
storing client data and transaction history data", or "determining at least an
expectation of future profit as a result of the session excluding transport costs", and

thus does not anticipate Applicant's invention or make it obvious in view of Levy, which is viewed by Applicant as being quite off topic.

6. Since claim 18 was rejected using the same arguments as provided for claim 1 by Examiner, the Applicant will follow suit and respectfully suggest that claim 18 will stand or fall with claim 1.

7. Claim 35 is new and is believed to be more limiting than claim 1, as it further recites routing steps not contemplated by Iwamura at all, and is believed by Applicant to be clearly patentable.

Summary

8. As all of the claims standing for examination have been shown to be patentable as amended and argued above over the art of record, applicant respectfully requests reconsideration, and that the present case be passed quickly to issue. If there are any time extensions needed beyond any extension specifically requested with this response, such extension of time is hereby requested. If there are any fees due beyond any fees paid with this amendment, authorization is given to deduct such fees from deposit account 50-0534.

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